Canon

Service Information

COPIER

☒**HARDWARE**
☐**SOFTWARE**

Model : DADF-A1

Ref. No. : FF-T01-X-000023-UK1
Date : February 29, 2000

Location : RF ASSEMBLY

Subject : **PREVENTION AGAINST PICK-UP ROLLER DRIVE GEAR (20T GEAR) BREAKAGE**

Reason : The pick-up roller drive gear (20T gear FS6-0708-000) can break due to mechanical overload when separation of documents is performed. To prevent this, the gear has been strengthened and the separation default is changed to permanent lower separation (the unit does not switch between upper and lower separation at the beginning of feeding documents but is permanently set to lower separation / top pick up). Additionally, the cam pressure plate mounting screw can become loose, causing interference, which may lead to gear breakage, therefore the screw is now fixed with a specialised locking substance.

Details : <Symptom>
Noise may be generated when switching on the copier and / or jams or poor feeding may occur when documents are fed.

<Cause>
When the unit switches between upper and lower separation prior to feeding documents from the top of the stack, the point of the cam shaft gear tooth can touch that of the switching gear tooth, which can lead to the gears locking. This load is then added to the pick-up roller drive gear (20T gear) which can cause it to break.

<Factory measures>
1. The gear has been strengthened by widening the radius at the teeth root of the pick-up roller drive gear from 0.2 to 0.4.
2. By changing the default separation to permanent lower separation, switching is eliminated when feeding documents in top pick up mode. Thus it prevents the gear from breakage by preventing the points of the teeth from touching each other.
3. The cam pressure plate mounting screw is fixed with a specialised locking substance, which prevents the displacement caused by the loosened screw.

Servicing: When the above problems occurs, the following three items are to be executed:
(See 'Affected machines' on page 3/3 to decide if the DADF A1 you are working on requires any of the following work)

1. The pick-up roller drive gear (20T gear) is replaced with a new type.

Stamp mark A, mould part of new gear

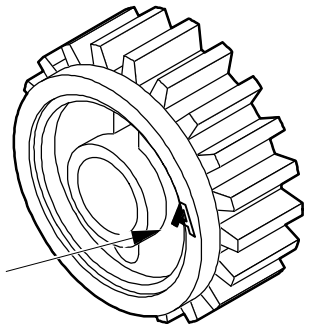

Fig. 1

2. Default separation is changed to permanent lower separation.

<Default setting change procedure>
Default is changed with DIPSW and PUSHSW of the DF controller PCB

Note:Remove any documents from the Hopper
With the Machine switched ON:
1) Put bits 4 and 6 of DIPSW1 to ON (all others OFF).
2) Press SW 3 once, LED 1 will light.
3) Press SW 2 five times, LED 2 will light
(At this time, switching to lower separation is executed)
4) Press SW 3 once, LED 2 will go off.
5) Switch the copier OFF
6) Return bits 4 and 6 of DIPSW 1 to OFF.
7) Switch the copier ON and test the Feeder.

- **This change will depend on the requirements of the user. If Bottom pick up / Face up output is required you should not change the setting and instead use COPIER>OPTION>USER>FACE-DOWN (SET TO 1), but you can only use this if the user does not have a Finisher fitted to their copier.**
- **If you need to change back to the original setting where the unit switches between upper and lower separation at the start of feeding documents, it can be done as below.**

Note:Remove any documents from the Hopper
With the Machine switched ON
1) Put bits 4 and 6 of DIPSW1 to ON (all others OFF).
2) Press SW 3 once, LED 2 will light.
3) Press SW 1 five times
(At this time, switching to upper separation is executed, LED 2 will go OFF and LED 1 will light)
4) Press SW 3 once LED 1 will go OFF.
5) Switch the copier OFF
6) Return bits 4 and 6 of DIPSW 1 to OFF.
7) Switch the copier ON and test the Feeder

3. Pressure cam mounting plate screw is fixed with locking compound so that the screw is prevented from becoming loose.

1) With reference to DADF A1 Service Manual (FY8-13FW-000) Page 3-14, D. Registration roller. Remove items referred to in steps 1, 2, 5 and 7 of the procedure.
2) Secure the cam pressure plate mounting screw shown in Fig.2 below.
Apply a suitable thread-locking compound to the screw and ensure that the screw is fixed tightly.

Suggested adhesive Loctite Nutlock (Part Number UK-PART –026)

Note: *When fixing with locking compound, be careful not to scatter compound or to fill in the cross-formed groove of the screw with compound.*

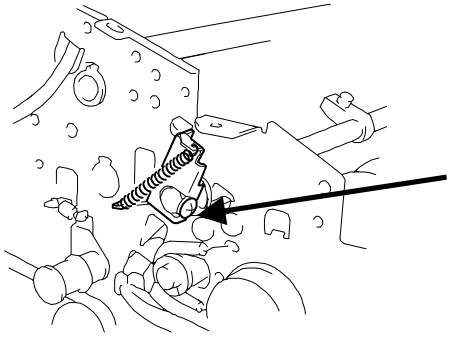

Fig. 2

3) Assemble DADF and Test unit

Service Parts :

No.	Description		Part number	Q'ty	Stock	Inter-change-ability	P.C. / Stock date
1	Old	GEAR, 20T	FS6-0708-000	1→0	C	No Yes	P15-82
	New	GEAR, 20T	FS6-0708-020	0→1	D		In stock

Affected machines:

<20T gear change> **ZNF08690** and later

<Document separation default change> **ZNF21144** and later

<Cam pressure plate screw fixed with adhesive> **ZNF05915** and later